



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------------------------|-------------|----------------------|------------------------|------------------|
| 10/080,317 | 02/21/2002 | Kuniaki Kurihara | 09792909-5351 | 8182 |
| 26263 | 7590 | 06/14/2006 | EXAMINER | |
| SONNENSCHN NATH & ROSENTHAL LLP | | | ADHAMI, MOHAMMAD SAJID | |
| P.O. BOX 061080 | | | ART UNIT | |
| WACKER DRIVE STATION, SEARS TOWER | | | PAPER NUMBER | |
| CHICAGO, IL 60606-1080 | | | 2616 | |

DATE MAILED: 06/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|---------------------------------------|--|--|
| Office Action Summary | Application No. 10/080,317 | Applicant(s) KURIHARA, KUNIAKI | |
| | Examiner Mohammad S. Adhami | Art Unit 2616 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 March 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

- Applicant's Amendment filed 3/27/2006 is acknowledged.
- Claims 1-5 and 9-12 have been amended.
- Claims 1-12 are pending.

Claim Objections

1. Claims 9-12 are objected to because of the following informalities: Claims 9-12 recite "storing for each of first corresponding packets" "First corresponding packets" should be rewritten as "corresponding first packets". Appropriate correction is required.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
2. Claims 3-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 3 it is unclear what the distinction between "first packets" and "second packets" is.

Claims 4 and 5 are rejected because they depend from claim 3.

3. Claims 9-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 9-12, the claim language for the limitation starting with "second deletion" is confusing. It is unclear how the second deletion means operates.

Art Unit: 2616

Additionally, it is unclear what the distinction between "first packets" and "second packets" is.

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1,2, and 6-8 are rejected under 35 U.S.C. 102(e) as being anticipated by Jalali (US App. 2004/0098657).

Re claims 1 and 6-8:

Jalali discloses *transmitting first information to a transmission party* (Fig.1 ref.106).

Jalali further discloses *receiving information about the reception of the first information from the transmission party* (Fig.1 ref.104 and Fig.3 ref.312).

Jalali further discloses *clocking the time from when the first information was transmitted* (Para.[0052] "the maximum number time for which a packet can remain in the first-time queue after the packet has been transmitted" where being able to know the time a packet has remained in a queue after being transmitted entails clocking the time for when the packet was first transmitted).

Jalali further discloses *determining whether or not the clocked time exceeds a reference value* (Fig.3 ref.316 and Para.[0052] "the parameters comprise, e.g., the maximum number of times a packet can be retransmitted and

Art Unit: 2616

the maximum number time for which a packet can remain in the first-time queue after the packet has been transmitted”).

Jalali further discloses *retransmitting the first information when it is determined that the clocked time does not exceed a reference value* (Fig.3 ref.320).

Jalali further discloses *transmitting second information when it is determined that the clocked time exceeds a reference value* (Fig.3 ref.318 where the first information is no longer transmitted, so the transmission of second information will begin).

Jalali further discloses *retransmitting the first information or transmitting the second information, as disclose above, when the transmission party indicates the first information has not been received* (Fig.3 ref.312 where a NAK indicates the first information has not been received).

Re claim 2:

Jalali further discloses *using packets for transmission* (Abstract A transmitting terminal transmits signals in a form of packets to a receiving terminal).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jalali in view of Hamilton (US 6,392,993).

Re claim 3 (as best understood):

As discussed above, Jalali meets all the limitations of the parent claims.

Jalali does not explicitly disclose *dividing individual first packets corresponding to first and second information into a plurality of corresponding individual second packets*.

Hamilton discloses *dividing individual first packets corresponding to first and second information into a plurality of corresponding individual second packets* (Fig.7 reference 124 where the “first packets” are messages and the “second packets” are the packets that make up the messages).

Jalali and Hamilton are analogous because they both pertain to data transmission.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Jalali to include dividing individual first packets into individual second packets as taught by Hamilton in order to use a commonly known method of transmitting data over a network.

7. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jalali in view of Hamilton as applied to claim 3 above, and further in view of Tseung (US 5,109,384).

Re claim 4 (as best understood):

As discussed above, Jalali meets all the limitations of the parent claims.

Jalali does not explicitly disclose *setting a flag indicating that the clocked time exceeds the reference value*.

Tseung discloses *setting a flag indicating that the clocked time exceeds the reference value* (Col.22 lines 62 and 63 "The timer would expire (the ACK timer expired on network B flag 866 would be set) and " where the timer expires after a "reference value" is exceeded).

Jalali, Hamilton and Tseung are analogous because they all pertain to data transmission.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Jalali to include setting a flag indicating the clocked time has exceeded a reference value as taught by Tseung in order to make appropriate data processing decisions regarding the communication of multi-packet messages.

8. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jalali in view of Hamilton and Tseung as applied to claim 4 above, and further in view of Kamihara (US 6,854,020,).

Re claim 5 (as best understood):

As discussed above, Jalali meets all the limitations of the parent claims.

Jalali does not explicitly disclose *writing the flag into the second information that is transmitted*.

Hamilton discloses *writing the flag into the second information that is transmitted* (Abstract "The positive reliability mode...sets [a]...flag in the packets

Art Unit: 2616

transmitted” where setting the flag in the packets involves “writing” the flag and Table 3 in Col.11 lines 43-60).

Jalali and Hamilton are analogous because they both pertain to data transmission.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Jalali to include writing a flag into the second information that is transmitted as taught by Hamilton in order to notify the receiver of the condition represented by the flag.

Jalali does not explicitly disclose *clearing the flag when all of the second packets are transmitted*.

Kamihara discloses *clearing the flag when all of the second packets are transmitted* (Col3 lines 55 and 56 “clearing the transmission-in-progress flag on condition that packet transmission has ended” where after the transmission is complete, a flag is cleared).

Jalali, Hamilton, Tseung, and Kamihara are analogous because they all pertain to data transmission.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Jalali to include clearing the flag after all the second packets are transmitted as taught by Kamihara in order to make appropriate data processing decisions regarding the communication of multi-packet messages.

9. Claims 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamilton in view of Knobel (US 6,765,871).

Re claims 9-12 (as best understood):

Hamilton discloses *receiving information transmitted for second packets via a network* (Figure 8 reference 148).

Hamilton further discloses *storing, for each of a first corresponding packets, information for each of the second packets received* (Figure 8 reference 150 and Col.19 lines 32-37 "Since messages may have to be buffered until all packets are received, embodiments within the scope of this invention may comprise means for storing received packets until an entire message is received...such means is illustrated by message receive list 150").

Hamilton further discloses *assembling information for each of the second packets stored in the storage means into information for each of the first packets before being divided* (Figure 8 reference 148 and Col.19 lines 29 and 30 "Normal processing of receiver 148 comprises assembling packets of a message").

Hamilton further discloses *determining whether or not a predetermined flag is contained in the information received* (Col.30 lines 64-66 "decision block 230 and step 232 which detected whether the ACK request flag is set" or Col.12 lines 50-52 "By examining the packet sequence number and, perhaps, the end of the message flag").

Hamilton further discloses *deleting the second packet, which is stored in the storage means and corresponds to the first packet which is prior to the first packet to which the second packet in which the flag is contained corresponds when the determination means determines that the flag is contained in the*

information received (Col.24 lines 6-9 "If the entire message has not been received before the timer expires, then message life timer 158 may delete the partially received message" where as disclosed by the applicant in Figure 4, the flag is set when a packet that is to be transmitted, is processed after a reference time. So the "second packet" deleted is the packet corresponding to a message that was not entirely sent before the reference time. This is the same as deleting a partial message, which is composed of "second packets", that is not received within the reference time).

Hamilton discloses buffering packets *until* they are all received (Col.19 lines 32 and 33 "messages may have to be buffered until all packets are received"). However, Hamilton does not explicitly disclose *a deletion means*.

Knobel discloses *deleting the second packet stored in the storage means, corresponding to the assembled packet when the second packet is assembled into the first corresponding packet by the assembling means* (Col.5 lines 47-51 "When a data frame has been sent to the buffer (i.e. a complete frame)...the other side [of the buffer] removes a complete frame" where a complete frame corresponds to the "first corresponding packet").

Hamilton and Knobel are analogous because they both pertain to data communications.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Hamilton as discussed above as taught by Knobel in order to efficiently utilize memory.

Response to Arguments

10. Applicant's arguments with respect to claims 1-8 have been considered but are moot in view of the new ground(s) of rejection.

11. Applicant's arguments filed 3/27/2006 have been fully considered but they are not persuasive.

Re claims 3-5:

In the Amendment filed 3/27/2006, on page 9 of the remarks section, Applicant contends that the presented amendment overcomes the 112 2nd paragraph rejection.

The Examiner respectfully disagrees. The Amendment still does not clarify the distinction between the first packets and the second packets.

Re claims 9-12:

In the Amendment filed 3/27/2006, on pages 9-10 of the remarks section, Applicant contends that the presented amendment overcomes the 112 2nd paragraph rejection.

The Examiner respectfully disagrees. The Amendment still does not clarify how the second deletion means operates.

In the Amendment filed 3/27/2006, on page 12 of the remarks section, Applicant contends that Hamilton is distinct from the claim because he "teaches that if the entire message (second packet) has not been received before the time expires; the same second packet is retransmitted".

The Examiner respectfully disagrees. Claims 9-12 do not talk about time expiring, therefore the argument is not related to the claimed limitations.

Furthermore, this does not prevent Hamilton and Knobel from being combined.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Fischer (US 6,640,325) and Brown (US 4,628,504) show transmitting a next message and not retransmitting a previous message is a retransmission limit is reached.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohammad S. Adhami whose telephone number is (571)272-8615. The examiner can normally be reached on Monday-Friday 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (571)272-3088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

Art Unit: 2616

USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MSA 6/11/2006



HASSAN KIZOU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600